

210145US00
10/076,064
Art Unit: 1714

2

LISTING OF CLAIMS

1-6 (Canceled)

7. (Original) An oxygen barrier packaging article, comprising:

an oxygen scavenging polymer comprising structure I:

(I) $-(\text{--X--R--X--O--CH}_2\text{--Ar--CH}_2\text{--O--})-$,

wherein -R- is selected from the group consisting of C₁-C₂₄ alkyl, C₁-C₂₄ substituted alkyl, C₆-C₂₄ aryl, and C₆-C₂₄ substituted aryl; -Ar- is selected from the group consisting of C₆-C₂₄ aryl and C₆-C₂₄ substituted aryl; and -X- is selected from the group consisting of null and -C(=O)-;

a transition metal oxidation catalyst; and

an energy-absorbing compound selected from the group consisting of microwave reactive materials and photoinitiators having a wavelength of maximum absorption of electromagnetic radiation from about 200 nm to about 750 nm.

8. (Original) The packaging article of claim 7, wherein the oxygen scavenging polymer consists essentially of units having structure I.

9. (Original) The packaging article of claim 7, wherein the transition metal catalyst is a cobalt salt.

10. (Original) The packaging article of claim 9, wherein the cobalt salt is selected from the group consisting of cobalt oleate, cobalt stearate, and cobalt neodecanoate.

11. (Currently Amended) The packaging article of claim 7, wherein the energy-absorbing compound is a photoinitiator selected from the group consisting of benzophenone derivatives containing at least two benzophenone moieties and having the formula:

$A_n(B)_m$

wherein

A is a bridging group selected from the group consisting of sulfur[(:)], oxygen[(:)], carbonyl[(:)],

-SiR''₂-, wherein each R'' is individually selected from alkyl groups containing from 1 to 12 carbon atoms, aryl groups containing 6 to 12 carbon atoms, or alkoxy groups containing from 1 to 12 carbon atoms[(:)], -NR'''-, wherein R''' is an alkyl group containing 1 to 12 carbon atoms, an aryl group

210145US00
10/076,064
Art Unit: 1714

3

- containing 6 to 12 carbon atoms, or hydrogen[[: or]], and an organic group containing from 1 to 50 carbon atoms;
- a is an integer from 0 to 11;
- B is a substituted or unsubstituted benzophenone group; and
- b is an integer from 2 to 12.
12. (Original) The packaging article of claim 11, wherein the photoinitiator is selected from the group consisting of dibenzoyl biphenyl, substituted dibenzoyl biphenyl, benzoylated terphenyl, substituted benzoylated terphenyl, tribenzoyl triphenylbenzene, substituted tribenzoyl triphenylbenzene, benzoylated styrene oligomer, and substituted benzoylated styrene oligomer.
 13. (Currently Amended) The packaging article of claim 7, further comprising an antioxidant ~~in the oxygen barrier layer~~.
 14. (Original) The packaging article of claim 13, wherein the antioxidant is selected from the group consisting of 2,6-di(t-butyl)-4- methylphenol (BHT), 2,2'-methylene-bis(6-t-butyl-p-cresol), triphenylphosphite, tris-(nonylphenyl)phosphite, vitamin E, tetra-bismethylene 3-(3,5-ditertbutyl-4-hydroxyphenyl)-propionate methane, and dilaurylthiodipropionate.
 15. (Currently Amended) The packaging article of claim 7, ~~wherein the oxygen barrier layer further comprises comprising~~ an oxygen barrier polymer selected from the group consisting of poly(ethylene vinyl alcohol) (EVOH), polyacrylonitrile, polyvinyl chloride (PVC), poly(vinylidene dichloride), polyethylene terephthalate (PET), and polyamide.
 16. (Original) The packaging article of claim 7, further comprising an oxygen barrier layer.
 17. (Original) The packaging article of claim 16, wherein the oxygen barrier layer comprises poly(ethylene vinyl alcohol) (EVOH), polyacrylonitrile, polyvinyl chloride (PVC), poly(vinylidene dichloride), polyethylene terephthalate (PET), or polyamide.
 18. (Original) The packaging article of claim 17, wherein the oxygen barrier layer comprises EVOH, and the packaging article further comprises a moisture barrier layer.
 19. (Original) The packaging article of claim 18, wherein the moisture barrier layer comprises polyethylene, polyethylene terephthalate (PET), or a mixture thereof.

210145US00
10/076,064
Art Unit: 1714

4

20. (Original) The packaging article of claim 7, further comprising a structural layer.
21. (Original) The packaging article of claim 20, wherein the structural layer comprises polyethylene, low density polyethylene, very low density polyethylene, ultra-low density polyethylene, high density polyethylene, polypropylene, polyethylene terephthalate (PET), polyethylene naphthalate (PEN), nylon, polyvinyl chloride, ethylene-vinyl acetate, ethylene-alkyl (meth)acrylates, ethylene-(meth)acrylic acid, ethylene-(meth)acrylic acid ionomers, aluminum foil, or paperboard.
22. (Original) The packaging article of claim 21, wherein the structural layer comprises PET, aluminum foil, or paperboard.
23. (Currently Amended) The packaging article of claim 7, wherein the ~~oxygen barrier layer is oxygen scavenging polymer, the transition metal oxidation catalyst and energy-absorbing compound~~ comprise a liner, coating, sealant, gasket, adhesive insert, non- adhesive insert, or fibrous mat insert in the packaging article.
24. (Original) The packaging article of claim 7, wherein the packaging article is in the form of a single layer film, a multilayer film, a single layer rigid article, or a multilayer rigid article.
- 25-32 (Canceled)